§ 173.5a

- (9) Transportation of the moveable fuel storage tender between its point of use and a liquefied petroleum gas distribution facility is authorized only if the cargo tank contains no more than five percent of its water capacity. A movable fuel storage tender may only be filled at the consumer's premises or point of use.
- (e) Liquid soil pesticide fumigants. MC 306 and DOT 406 cargo tank motor vehicles and DOT 57 portable tanks may be used to transport liquid soil pesticide fumigants, Pesticides, liquid, toxic, flammable, n.o.s., flash point not less than 23 degrees C. 6.1. UN2903. PG II. exclusively for agricultural operations by a private motor carrier between a bulk loading facility and a farm (including between farms). However, transportation is not to exceed 150 miles between the loading facility and the farm, and not more than five days are permitted for intermediate stops for storage. Additionally, temporary transport is permitted only under the following conditions:
- (1) Cargo tanks. MC 306 and DOT 406 cargo tank motor vehicles must:
- (i) Meet qualification and maintenance requirements (including periodic testing and inspection) in accordance with Subpart E of Part 180 of this subchapter;
- (ii) Conform to the pressure relief system requirements specified in §173.243(b)(1):
- (iii) For MC 306 cargo tanks, be equipped with stop-valves capable of being remotely closed by manual and mechanical means; and
- (iv) For DOT 406 cargo tanks, conform to the bottom outlet requirements specified in §173.243(b)(2).
- (2) Portable tanks. DOT 57 portable tanks must—
- (i) Be constructed of stainless steel; and
- (ii) Meet qualification and maintenance requirements of Subpart G of Part 180 of this subchapter.
- (f) See §173.315(m) pertaining to nurse tanks of anhydrous ammonia.
- (g) See §173.6 pertaining to materials of trade.

(h) See §172.800(b) pertaining to security plans.

[Amdt. 173–259, 62 FR 1215, Jan. 8, 1997, as amended by Amdt. 173–262, 62 FR 49566, Sept. 22, 1997; Amdt. 173–259, 63 FR 8142, Feb. 18, 1998; 65 FR 50460, Aug. 18, 2000; 70 FR 73165, Dec. 9, 2005; 73 FR 4717, Jan. 28, 2008; 76 FR 5491, Feb. 1, 2011]

§ 173.5a Oilfield service vehicles, mechanical displacement meter provers, and roadway striping vehicles exceptions.

- (a) Oilfield service vehicles. Notwithstanding §173.29 of this subchapter, a cargo tank motor vehicle used in oilfield servicing operations is not subject to the specification requirements of this subchapter provided—
- (1) The cargo tank and equipment contains only residual amounts (*i.e.*, it is emptied so far as practicable) of a flammable liquid alone or in combination with water.
- (2) No flame producing device is operated during transportation, and
- (3) The proper shipping name is preceded by "RESIDUE: LAST CONTAINED * * *" on the shipping paper for each movement on a public highway.
- (b) Mechanical displacement meter provers. (1) A mechanical displacement meter prover, as defined in §171.8 of this subchapter, permanently mounted on a truck chassis or trailer and transported by motor vehicle is excepted from the specification packaging requirements in part 178 of this subchapter provided it—
- (i) Contains only the residue of a Division 2.1 (flammable gas) or Class 3 (flammable liquid) material. For liquids, the meter prover must be drained to not exceed 10% of its capacity or, to the extent that draining of the meter prover is impracticable, to the maximum extent practicable. For gases, the meter prover must not exceed 25% of the marked pressure rating;
- (ii) Has a water capacity of 3,785 L (1.000 gallons) or less:
- (iii) Is designed and constructed in accordance with chapters II, III, IV, V and VI of ASME Standard B31.4 (IBR, see §171.7 of this subchapter);
- (iv) Is marked with the MAWP determined from the pipe component with the lowest pressure rating; and

- (v) Is equipped with rear-end protection as prescribed in §178.337-10(c) of this subchapter and 49 CFR 393.86 of the Federal Motor Carrier Safety Regulations.
- (2) The description on the shipping paper for a meter prover containing the residue of a hazardous material must include the phrase "RESIDUE: LAST CONTAINED * * * " before the basic description.
- (3) Periodic test and inspection. (i) Each meter prover must be externally visually inspected once a year. The external visual inspection must include at a minimum: checking for leakage, defective fittings and welds, defective closures, significant dents and other defects or abnormalities which indicate a potential or actual weakness that could render the meter prover unsafe for transportation; and
- (ii) Each meter prover must be pressure tested once every 5 years at not less than 75% of design pressure. The pressure must be held for a period of time sufficiently long to assure detection of leaks, but in no case less than 5 minutes.
- (4) In addition to the training requirements in subpart H, the person who performs the visual inspection or pressure test and/or signs the inspection report must have the knowledge and ability to perform them as required by this section.
- (5) A meter prover that fails the periodic test and inspection must be rejected and removed from hazardous materials service unless the meter prover is adequately repaired, and thereafter, a successful test is conducted in accordance with the requirements of this section.
- (6) Prior to any repair work, the meter prover must be emptied of any hazardous material. A meter prover

- containing flammable lading must be purged.
- (7) Each meter prover successfully completing the external visual inspection and the pressure test must be marked with the test date (month/year), and the type of test or inspection as follows:
- (i) V for external visual inspection; and
 - (ii) P for pressure test.
- The marking must be on the side of a tank or the largest piping component in letters 32 mm (1.25 inches) high on a contrasting background.
- (8) The owner must retain a record of the most recent external visual inspection and pressure test until the next test or inspection of the same type is successfully completed. The test or inspection report must include the following:
- (i) Serial number or other meter prover identifier;
- (ii) Type of test or inspection performed;
 - (iii) Test date (month/year);
- (iv) Location of defects found, if any, and method used to repair each defect;
- (v) Name and address of person performing the test or inspection;
- (vi) Disposition statement, such as "Meter Prover returned to service" or "Meter Prover removed from service".
- (c) Roadway striping. In addition to conformance with all other applicable requirements of this subchapter, non-DOT specification cargo tanks used for roadway striping are authorized provided all the following conditions in this paragraph (c) are met.
- (1) Authorized materials. Only the hazardous materials listed in the table below may be transported in roadway striping vehicles. Cargo tanks may not be filled to a capacity that would be greater than liquid full at 130 °F.

HAZARDOUS MATERIALS DESCRIPTION

Proper shipping name	Hazard class/ division	Identification number	Packing group
Adhesives, containing a flammable liquid	3	UN1133	П
Paint including paint, lacquer, enamel, stain, shellac solution, varnish, polish, liquid filler, and liquid lacquer base.	3	UN1263	П
Paint related material including paint thinning drying, removing, or reducing compound.	3	UN1263	II
Flammable liquids, n.o.s. a	3	UN1993	II
Gasoline	3	UN1203	II
Acetone b	3	UN1090	II
Dichloromethane b	6.1	UN1593	l III

HAZARDOUS MATERIALS DESCRIPTION—Continued

Proper shipping name	Hazard class/ division	Identification number	Packing group
Ethyl methyl ketone or Methyl ethyl ketone ^b Ethyl acetate ^b	3 3	UN1193 UN1173	II II
Methanol ^b Toganic peroxide type E, liquid (Dibenzoyl peroxide) ^c Petroleum distillates, n.o.s. <i>or</i> Petroleum products, n.o.s. ^b	3 5.2 3	UN1230 UN3107 UN1268	
1,1,1-Trichloroethane b	6.1 3	UN2831 UN1294	III
Kylenes b	3 9 8	UN1307 UN3082 UN3267	II, III III III
Corrosive liquid, basic, organic, n.o.s.° Corrosive liquids, n.o.s.° Elevated temperature liquid, n.o.s., <i>at or above 100 °C and below its</i>	8 9	UN1760 UN3257	

- a: Adhesive containing ethyl acetate.
- b: Solvent. c: Catalyst.
- d: Thermoplastic material non-hazardous at room temperature.
- (2) Cargo tank requirements. Each non-DOT specification cargo tank used for roadway striping must be securely bolted to a motor vehicle and must-
- (i) Be constructed and certified in conformance with the HMR in effect at the time of its manufacture and must be marked accordingly. For questions regarding these requirements, contact PHMSA by either: (1) Telephone (800) 467-4922 or (202) 366-4488 (local); or (2) electronic mail (e-mail) to: infocntr@dot.gov;
- (ii) Have a minimum design pressure of 100 psig;
- (iii) Have a maximum capacity of 500 gallons:
- (iv) For solvents and organic peroxides, the cargo tank may not contain more than 50 gallons;
- (v) Be given an external visual inspection prior to each use to ensure that it has not been damaged on the previous trip:
- (vi) Be retested and reinspected in accordance with §180.407(c) of this subchapter as specified for an MC 331 cargo tank motor vehicle: and
- (vii) Be securely mounted to a motor vehicle in accordance with the securement provisions prescribed in §§ 393.100 through 393.106 of this title.
- (3) Test records. The owner or operator of the roadway striping vehicle must maintain hydrostatic test records in accordance with §180.417(b) and must make those records available to any representative of the Department of Transportation upon request.

- (4) Marking. A non-DOT specification cargo tank used for roadway striping must be plainly marked on both sides near the middle in letters at least two inches in height on a contrasting background "ROADWAY STRIPING".
- (5) Operational controls. A non-DOT specification cargo tank used for roadway striping may not be pressurized when the motor vehicle is traveling to and from job sites. Additionally, the distance traveled by a non-DOT specification cargo tank used for roadway striping may not exceed 750 miles. Thermoplastic resin may only be heated during roadway striping operations.
- [70 FR 3308, Jan. 24, 2005, as amended at 75 FR 27213, May 14, 2010; 76 FR 5492, Feb. 1,

§ 173.5b Portable and mobile refrigeration systems.

This section authorizes the highway transportation of residual amounts of Division 2.2 refrigerant gases or anhydrous ammonia contained in non-specification pressure vessels that are components of refrigeration systems, which may or may not be permanently mounted to a transport vehicle, used for agricultural operations. These refrigeration systems are used at field sites to cool (pre-cool) produce before the produce is loaded into trucks or railcars for market or used to supplement stationary refrigeration systems during peak harvest times. The components of these refrigeration systems are commonly known as vacuum tubes, accumulators, refrigeration units, ice